

Appl. No. 09/988,667
Amdt. Dated June 1, 2005
Reply to Office action of March 11, 2005
Attorney Docket No. P13791-US1
EUS/J/P/05-1145

REMARKS/ARGUMENTS

1.) Claim Rejections – 35 U.S.C. § 103 (a)

The Examiner rejected claims 1 and 13-27 as being unpatentable over Harris, *et al.* (US 6,507,243) in view of Dean, *et al.* (US 5,839,052); and claims 2-12 over Harris in view of Dean and further in view of Haataja, *et al.* (Pub No. US 2002/0149518). The Applicants traverse the rejections.

Claim 1 recites:

1. A method for compensating a data-dependency of a power measurement, the data dependency being caused by linear modulation, the method comprising:
 - performing a first measurement of a transmitted output power;
 - performing a second measurement of a reflected power, wherein the second measurement-is performed time multiplexed from the first measurement;
 - calculating a first average power based on data transmitted during the first measurement;
 - calculating a second average power based on data transmitted during the second measurement; and
 - compensating at least one of the first measurement and the second measurement based on a difference between the first average power and the second average power. (emphasis added).

As described at page 2 of Applicants' specification, linear modulation techniques insert large variations in output power depending on the sequence of data which are transmitted. In such cases, the measurement of the output power and reflected power does not lead to reliable results, due to the data dependency of the output power. The Applicants invention solves this problem by compensating for the data-dependency of the power measurements. Harris fails to address the problem.

The Examiner asserts that Harris teaches a method for compensating a data-dependency of a power measurement, including "calculating a first average power based on data transmitted during [a] first measurement and a second average power based on data transmitted during [a] second measurement (see figure 9B, col. 14, ln. 1-49)." The Applicants have reviewed the teachings of Harris, particularly that expressly referenced by the Examiner, and find no teachings relating to compensating power

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measurements in linearly-modulated systems based on data transmitted during the power measurements. At column 14, Harris discusses the measurement of output and reflected power and a calculation of voltage standing wave ratio (VSWR), but makes no mention of calculating the average power as a function of the data transmitted during those measurements. The primary, if only, reason to calculate such average powers as a function of the data transmitted would be if it were desired to compensate the measurements for the variations introduced by the transmitted data during the measurements. Whereas Harris does not calculate the average power as a function of the data transmitted during the measurements, it is apparent that it does not address such compensation. **This fact is recognized by the Examiner, wherein he states that "Harris fails to teach the compensating . . ."** Looking to address the deficiency of Harris, for a problem not even addressed by Harris, the Examiner looks to the teachings of Dean. Dean, however, fails to cure the deficiency.

The Examiner looks to column 13, lines 20-31, of Dean, and asserts that Dean teaches "compensating at least one of the first measurement and the second measurement based on a difference between the first average power and the second average power." What Dean actually teaches is:

Given the importance of power control to the CDMA system and the complexity and variability of the amplitude response of the cable plant, power control becomes an important aspect of the present invention. The forward link power control compensation is accomplished by use of a RAD reference signal transmitted over the downstream link. The reverse link power control compensation is accomplished by use of an upstream gain reference signal transmitted over the upstream link. The form and function of the RAD reference signal and upstream gain reference signal are explained explicitly below. (emphasis added)

What Dean describes is compensation of forward and reverse link power control through the transmission of reference signals transmitted over upstream and downstream links, which has nothing to do with compensating output and reflected power measurements based on data transmitted during such measurements. Thus, not only does Dean also not address the problem solved by Applicants' invention, it fails to even use similar techniques to solve a different problem. Thus, there is no basis for

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combining the references. Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness of claim 1.

Whereas independent claims 18, 20, 23, 26 and 27 recite limitations analogous to those of claim 1, the Examiner has also failed to establish a *prima facie* case of those claims. Furthermore, whereas claims 2-17, 19, 21-22 and 24-25 are dependent from claims 1, 18, 20 and 23, respectively, and include the limitations thereof, they are also not obvious over Harris in view of Dean.

CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1-27.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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